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ABSTRACT

The changing role of mathematics in society may require a different mathematics curriculum in the schools. Curriculum builders work constructing pieces of the new mathematics curriculum. To last, this new curriculum must be based on a foundation of experience and research. This book provides access to that foundation for secondary schools and two-year colleges. Sections deal with curricular goals and instruction in algebra, geometry, precalculus, calculus, statistics and probability, and discrete mathematics. Concerns are expressed for the slow learner, gifted, and sex-related differences in mathematics. An opening chapter provides historical background. Other chapters deal with mathematical learning theory, the development of curriculum, evaluation, the use of computers, mathematics as recreation, and mathematical applications. Inservice teacher education and trends in secondary and two-year college education are discussed and a final chapter lists resources under the headings of organizations, newsletters, periodicals, National Council of Teachers of Mathematics yearbooks, films/videotapes, general references, and selected distributors and publishers. Annotated bibliographies are included throughout the book. (DC)

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